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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,708	10/09/2001	Youmin Shu	16U 102 R1	4218

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ORIGENE TECHNOLOGIES, INCORPORATED
6 TAFT COURT
SUITE 100
ROCKVILLE, MD 20850

EXAMINER
ANDRES, JANET L

ART UNIT	PAPER NUMBER
1646	

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/971,708	SHU ET AL.	
	Examiner	Art Unit	
	Janet L. Andres	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-5, drawn to polynucleotides, classified in class 435, subclass 69.1, and class 536, subclass 23.5.

II. Claims 6 and 7, drawn to polypeptides, classified in class 530, subclass 350.

III. Claims 8 and 9, drawn to methods of treatment using and antibody, classified in class 424, subclass 239.1.

IV. Claims 8 and 9, drawn to methods of treatment using antisense, classified in class 435, subclass 455.

V. Claim10-14, drawn to methods of diagnosis, classified in class 424, subclass 9.1.

VI. Claim 15, drawn to screening methods, classified in class 435, subclasses 6 and 7.1.

VII. Claim 16, drawn to a method of detecting polymorphisms, classified in class 435, subclass 69.1.

VIII. Claim 17-19, drawn to transgenic cells and animals, classified in class 800, subclass 8.

IX. Claim 20, drawn to an advertising method, classified in class 700, subclass 90.

X. Claim 21, drawn to antibodies, classified in class 530, subclasses 388.1 and 389.1.

Claims appear in more than one group if they encompass more than one invention.

The inventions are distinct, each from the other because of the following reasons:

The polynucleotides of Invention I are not related to the polypeptides of Invention II. They differ structurally and functionally and cannot be used together or interchangeably.

The polynucleotides of Invention I are not related to the methods of Invention III. They cannot be used in the methods.

The polynucleotides of Invention I are distinct from the methods of Invention IV. They have other uses, such as the generation of protein.

The polynucleotides of Invention I are distinct from the methods of Invention V. They have other uses, such as the generation of protein.

The polynucleotides of Invention I are distinct from the methods of Invention VI. They have other uses, such as the generation of protein.

The polynucleotides of Invention I are distinct from the methods of Invention VII. They have other uses, such as the generation of protein.

The polynucleotides of Invention I are not related to the products of Invention VIII. They differ structurally and functionally and cannot be used together or interchangeably.

The polynucleotides of Invention I are distinct from the methods of Invention IX. They can be advertised in other ways, such as by flyers.

The polynucleotides of Invention I are not related to the antibodies of Invention X. They differ structurally and functionally and cannot be used together or interchangeably.

The polypeptides of Invention II are not related to the methods of Invention III. They cannot be used in the methods.

The polypeptides of Invention II are not related to the methods of Invention IV. They cannot be used in the methods.

The polypeptides of Invention II are distinct from the methods of Invention V. They have other uses, such as the generation of antibodies.

The polypeptides of Invention II are distinct from the methods of Invention VI. They have other uses, such as the generation of antibodies.

The polypeptides of Invention II are not related to the methods of Invention VII. They cannot be used in the methods.

The polypeptides of Invention II are not related to the products of Invention VIII. They differ structurally and functionally and cannot be used together or interchangeably.

The polypeptides of Invention II are distinct from the methods of Invention IX. They can be advertised in other ways, such as by flyers.

The polypeptides of Invention II are not related to the antibodies of Invention X. They differ structurally and functionally and cannot be used together or interchangeably.

The methods of Invention III are distinct from the methods of Invention IV because they require different reagents and different method steps.

The methods of Invention III are not related to the methods of Invention V. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention III are not related to the methods of Invention VI. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention III are not related to the methods of Invention VII. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention III are not related to the products of Invention VIII. They cannot be used to generate the products.

The methods of Invention III are not related to the methods of Invention IX. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention III are distinct from the antibodies of Invention X. The antibodies have other uses, such as protein purification.

The methods of Invention IV are distinct from the methods of Invention V. They require different method steps and have different goals and outcome measures.

The methods of Invention IV are not related to the methods of Invention VI. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention IV are distinct from the methods of Invention VII. They require different method steps and have different goals and outcome measures.

The methods of Invention IV are not related to the products of Invention VIII. They cannot be used to generate the products.

The methods of Invention IV are not related to the methods of Invention IX. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention IV are not related to the antibodies of Invention X. The antibodies cannot be used in the methods.

The methods of Invention V are not related to the methods of Invention VI. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention V are distinct from the methods of Invention VII. They require different method steps and have different goals and outcome measures.

The methods of Invention V are not related to the products of Invention VIII. They cannot be used to generate the products.

The methods of Invention V are not related to the methods of Invention IX. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention V are distinct from the antibodies of Invention X. The antibodies have other uses, such as protein purification.

The methods of Invention VI are not related to the methods of Invention VII. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention VI are not related to the products of Invention VIII. They cannot be used to generate the products.

The methods of Invention VI are not related to the methods of Invention IX. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention VI are distinct from the antibodies of Invention X. The antibodies can be detected in other ways, such as by Western blotting.

The methods of Invention VII are not related to the products of Invention VIII. They cannot be used to generate the products.

The methods of Invention VII are not related to the methods of Invention IX. They require different reagents and method steps and have different goals and outcome measures.

The methods of Invention VII are not related to the antibodies of Invention X. The antibodies cannot be used in or detected by the methods.

The products of Invention VIII are not related to the methods of Invention IX. The products cannot be used in and are not advertised by the methods.

The products of Invention VIII are not related to the antibodies of Invention X. They differ structurally and functionally and cannot be used together or interchangeably.

The methods of Invention IX are not related to the antibodies of Invention X. The antibodies cannot be used in and are not advertised by the methods.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and different searches are required for the different groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Andres, whose telephone number is 703-305-0557. The examiner can normally be reached on 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 703-308-6564. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Janet L. Andres, Ph.D.
Patent Examiner

March 25, 2003